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PENDING CLAIMS
Serial No: 09/041,975
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June 2000¹

23. A purified HIV-1 variant virus,

wherein said HIV-1 variant virus differs at the amino acid sequence level from the group of viruses consisting of HIV-1_{IIIb}, HIV-1_{BRU}, and HIV-1_{ARV-2} greater than 3.4 % in the entire Gag protein, 3.1% in the entire Pol protein, and 13.0% in the entire Env protein,

wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of said HIV-1 variant virus,

wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE MICRO-ORGANISMES (CNCM) under No. I-641, and

wherein the genetic structure of said HIV-1 variant is 5-LTR-gag-pol-vif-vpr-tat-rev-vpu-env-nef-LTR-3'.

24. The HIV-1 variant virus of claim 23, wherein the nucleic acid of said HIV-1 variant virus can be detected by hybridization with a DNA probe comprising the genomic cDNA of HIV-1_{MAL}.

25. The HIV-1 variant virus of claim 23, wherein the nucleic acid of said HIV-1 variant virus can be detected by hybridization with a DNA probe comprising a restriction enzyme fragment of the cDNA of HIV-1_{MAL}, and wherein the restriction enzyme is selected from the group consisting of *Aval*, *BamHI*, *BglII*, *EcoRI*, *HincII*, *HindIII*, *KpnI*, *NdeI*, *PstI*, *SacI*, and *XbaI*.

26. A purified HIV-1 variant virus,

wherein said HIV-1 variant virus differs genetically from the group of viruses consisting of HIV-1_{IIIb}, HIV-1_{BRU}, and HIV-1_{ARV-2} greater than 3.4 % in Gag, 3.1% in Pol, and 13.0% in Env, and from HIV-1_{BRU} by at least 20.7% in Env,

wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of said HIV-1 variant virus, and

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wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE MICRO-ORGANISMES (CNCM) under No. I-641.

27. A purified HIV-1 variant virus,

wherein said HIV-1 variant virus differs genetically from the group of viruses consisting of HIV-1_{IIIb}, HIV-1_{BRU}, and HIV-1_{ARV-2} greater than 3.4 % in Gag, 3.1% in Pol, and 13.0% in Env, and from HIV-1_{BRU} by at least 9.8 % in Gag,

wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of said HIV-1 variant virus, and

wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE MICRO-ORGANISMES (CNCM) under No. I-641.

28. A purified HIV-1 variant virus,

wherein said HIV-1 variant virus differs genetically from the group of viruses consisting of HIV-1_{IIIb}, HIV-1_{BRU}, and HIV-1_{ARV-2} greater than 3.4 % in Gag, 3.1% in Pol, and 13.0% in Env, and from HIV-1_{BRU} by at least 5.5% in Pol,

wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of said HIV-1 variant virus, and

wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE MICRO-ORGANISMES (CNCM) under No. I-641.

29. A purified HIV-1 variant virus,

wherein said HIV-1 variant virus differs genetically from the group of viruses— consisting of HIV-1_{IIIb}, HIV-1_{BRU}, and HIV-1_{ARV-2} greater than 3.4 % in Gag, 3.1% in Pol, and 13.0% in Env, and from HIV-1_{BRU} by at least 9.8 % in Gag, 5.5% in Pol, and 20.7% in Env,

wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of said HIV-1 variant virus, and

wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE MICRO-ORGANISMES (CNCM) under No. I-641.

30. The HIV-1 variant virus of claim 29, wherein said HIV-1 variant virus differs genetically from HIV-1_{MAL} by 0-10.8% in Gag, 0%-8.4% in Pol, and 0%-19.8% in Env.

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31. The HIV-1 variant virus of claim 30, wherein said virus is HIV-1_{MAL}.
32. The HIV-1 variant virus of claim 30, wherein said virus is HIV-1_{EU}.
33. The HIV-1 variant virus of any one of claims 26-30, wherein the nucleic acid of said HIV-1 variant virus can be detected by hybridization with a DNA probe selected from the group of nucleic acids consisting of the genomic cDNA of HIV-1_{MAL} and restriction enzyme fragments of the cDNA of HIV-1_{MAL}, and wherein the restriction enzyme is selected from the group consisting of *Aval*, *BamHI*, *BgII*, *EcoRI*, *HincII*, *HindIII*, *KpnI*, *NdeI*, *PstI*, *SacI*, and *XbaI*.
34. A purified HIV-1 variant virus,
wherein said HIV-1 variant virus differs genetically from HIV-1_{BRU} by at least 21.7% in Env,
wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of said HIV-1 variant virus, and
wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE MICRO-ORGANISMES (CNCM) under No. I-641.
35. A purified HIV-1 variant virus,
wherein said HIV-1 variant virus differs genetically from the group of viruses consisting of HIV-1_{IIIb}, HIV-1_{BRU}, and HIV-1_{ARV-2} greater than 3.4 % in Gag, 3.1% in Pol, and 13.0% in Env, and from HIV-1_{BRU} by at least 12.0 % in Gag,
wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of said HIV-1 variant virus, and
wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE MICRO-ORGANISMES (CNCM) under No. I-641.
36. A purified HIV-1 variant virus,
wherein said HIV-1 variant virus differs genetically from the group of viruses consisting of HIV-1_{IIIb}, HIV-1_{BRU}, and HIV-1_{ARV-2} greater than 3.4 % in Gag, 3.1% in Pol, and 13.0% in Env, and from HIV-1_{BRU} by at least 7.7% in Pol,
wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of said HIV-1 variant virus, and

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wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE MICRO-ORGANISMES (CNCM) under No. I-641.

37. A purified HIV-1 variant virus,

wherein said HIV-1 variant virus differs genetically from the group of viruses consisting of HIV-1_{III B}, HIV-1_{BRU}, and HIV-1_{ARV-2} greater than 3.4 % in Gag, 3.1% in Pol, and 13.0% in Env, and from HIV-1_{BRU} by at least 9.8 % in Gag, 5.5% in Pol and 20.7% in Env,

wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of said HIV-1 variant virus, and

wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE MICRO-ORGANISMES (CNCM) under No. I-641.

38. The HIV-1 variant virus of any one of claims 34-37, wherein the nucleic acid of said HIV-1 variant virus can be detected by hybridization with a DNA probe selected from the group of nucleic acids consisting of the genomic cDNA of HIV-1_{MAL} and restriction enzyme fragments of the cDNA of HIV-1_{MAL}, and wherein the restriction enzyme is selected from the group consisting of *Aval*, *BamHI*, *BgII*, *EcoRI*, *HincII*, *HindIII*, *KpnI*, *NdeI*, *PstI*, *SacI*, and *XbaI*.